

FIG. 1A

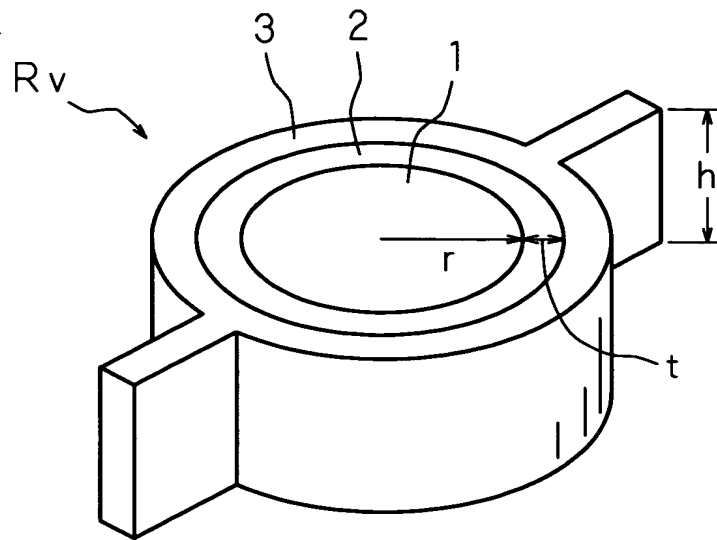


FIG. 1B

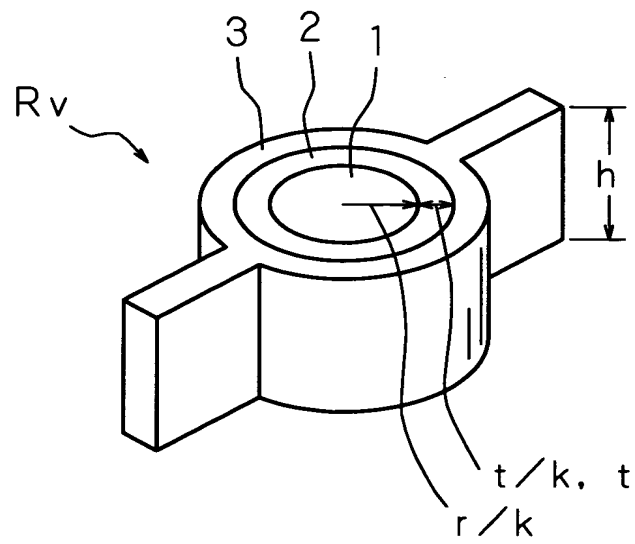
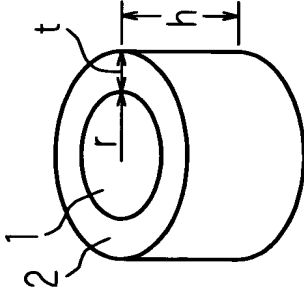
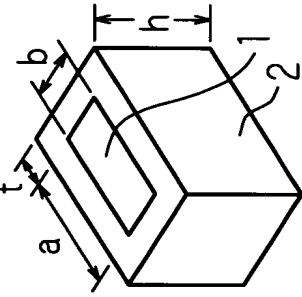
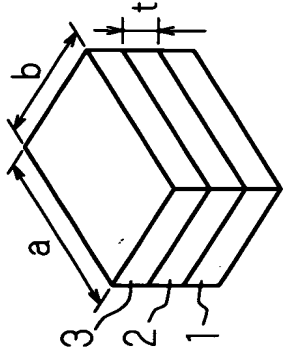


FIG. 2

(t:NO SCALING IS APPLIED)

STRUCTURE	BEFORE SCALING	AFTER SCALING (1/k TIMES)	
	AREA, RESISTANCE	AREA, RESISTANCE	R_s/R_o
	$S_o = 2\pi r h$ $R_o = \rho t / 2\pi r h$	$S_s = 2\pi r h / k$ $R_s = \rho t k / 2\pi r h$	k
	$S_o = 2(a+b)h$ $R_o = \rho t / 2(a+b)h$	$S_s = 2(a+b)h / k$ $R_s = \rho t k / 2(a+b)h$	k
	$S_o = ab$ $R_o = \rho t / ab$	$S_s = ab / k^2$ $R_s = \rho t k^2 / ab$	k^2

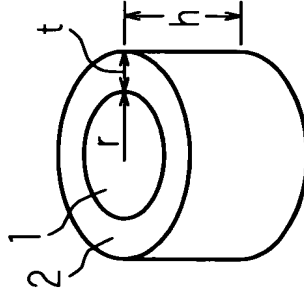
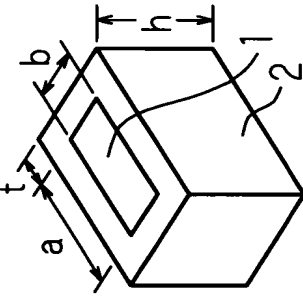
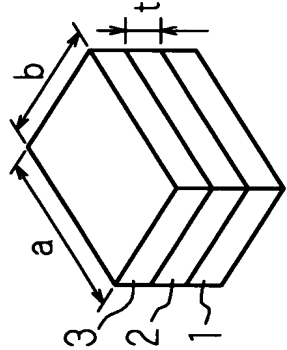
CYLINDER

PRISM

CONVENTIONAL

FIG. 3

(t:NO SCALING IS APPLIED)

STRUCTURE	BEFORE SCALING	AFTER SCALING (1/k TIMES)		Rs/Ro
	AREA, RESISTANCE	AREA, RESISTANCE		
	$S_o=2\pi r h$ $R_o=\rho t/2\pi r h$	$S_s=2\pi r h/k$ $R_s=\rho t/2\pi r h$	1	
	$S_o=2(a+b) h$ $R_o=\rho t/2(a+b) h$	$S_s=2(a+b) h/k$ $R_s=\rho t/2(a+b) h$	1	
	$S_o=ab$ $R_o=\rho t/ab$	$S_s=ab/k^2$ $R_s=\rho t k/ab$	k	

CYLINDER

PRISM

CONVEN-
TIONAL

FIG. 4A

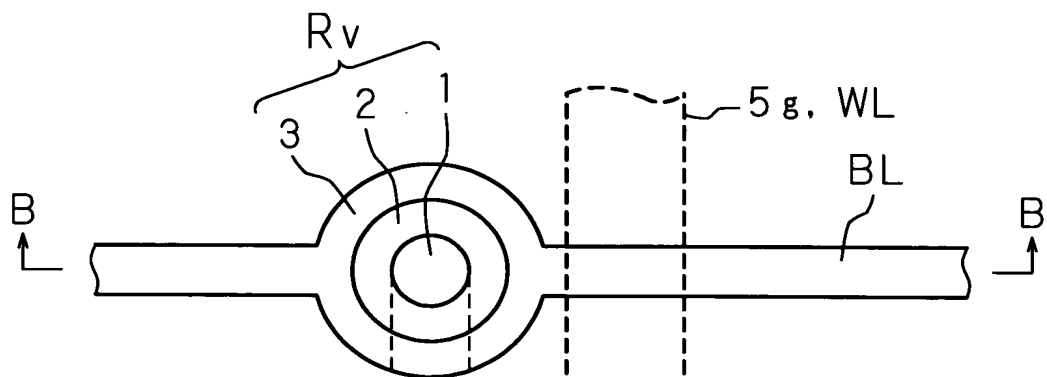


FIG. 4B

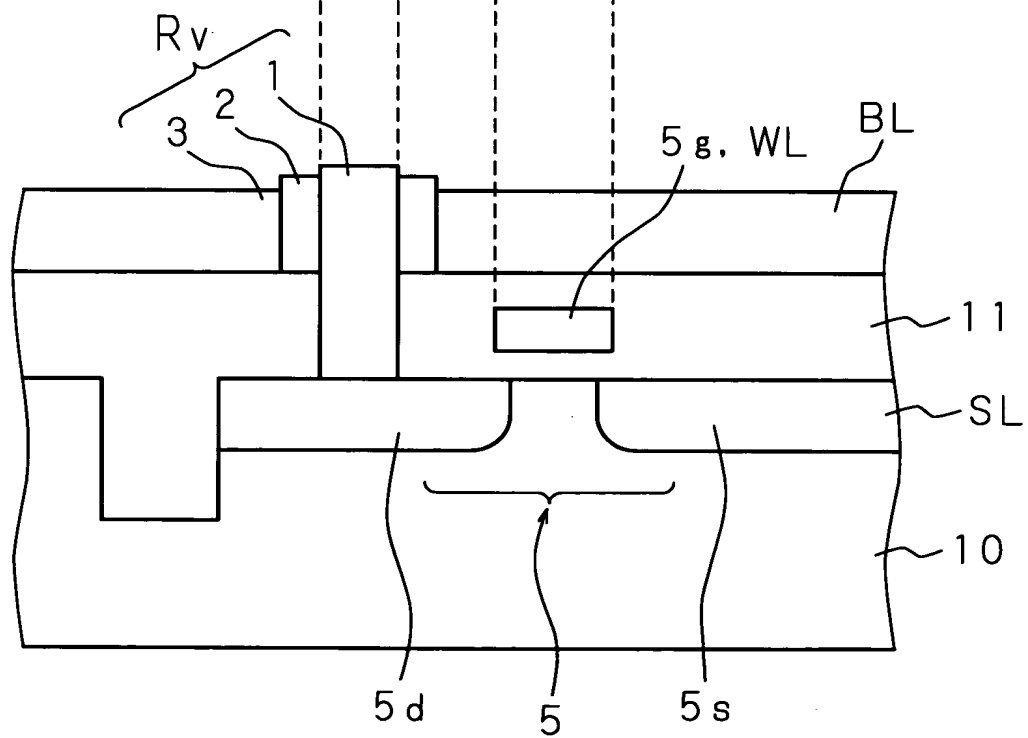


FIG. 5A

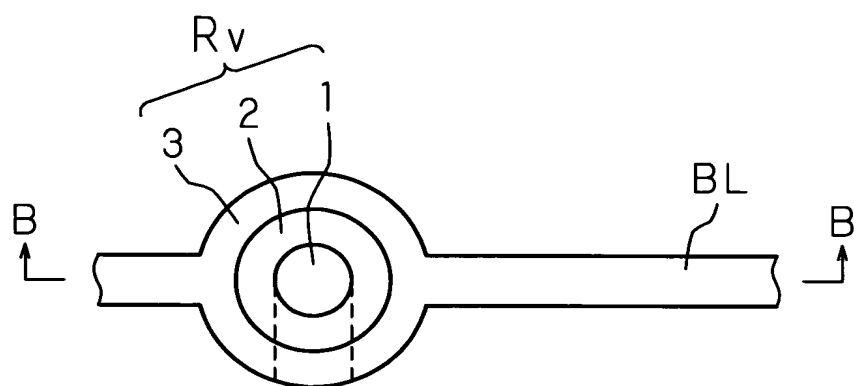


FIG. 5B

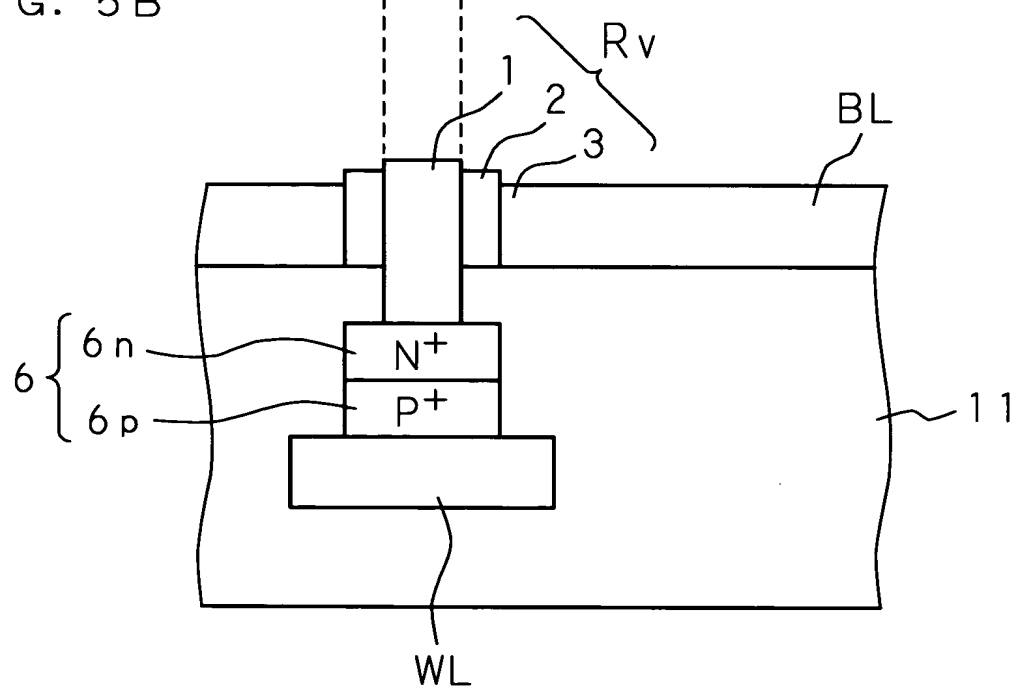


FIG. 6A

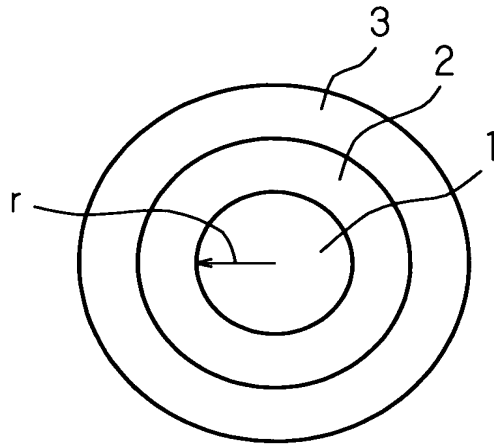


FIG. 6C

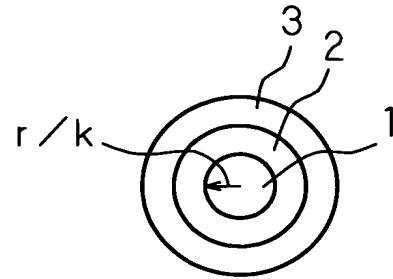


FIG. 6B

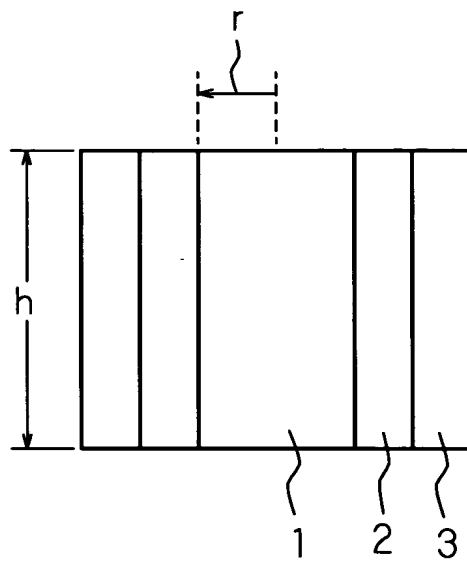


FIG. 6D

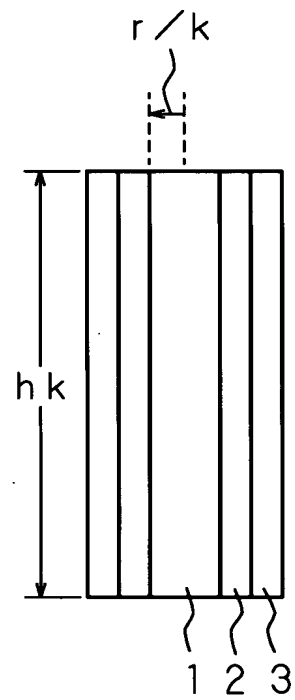


FIG. 7
PRIOR ART

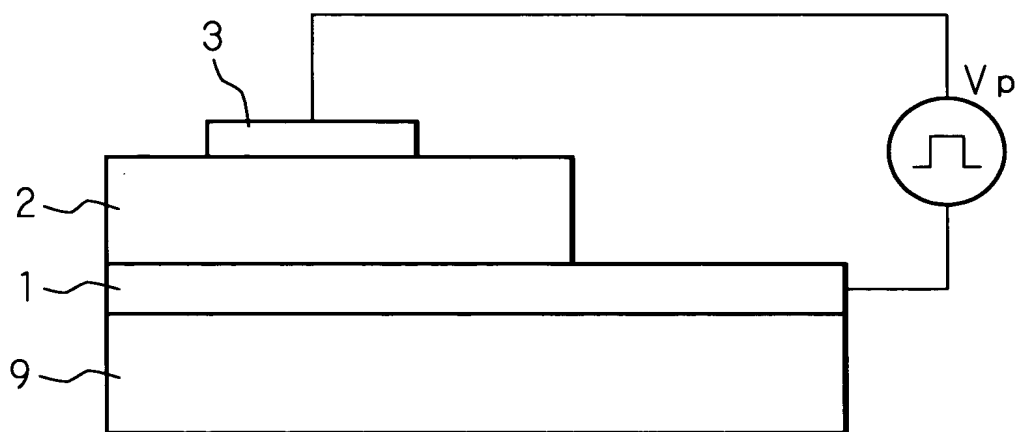


FIG. 8
PRIOR ART

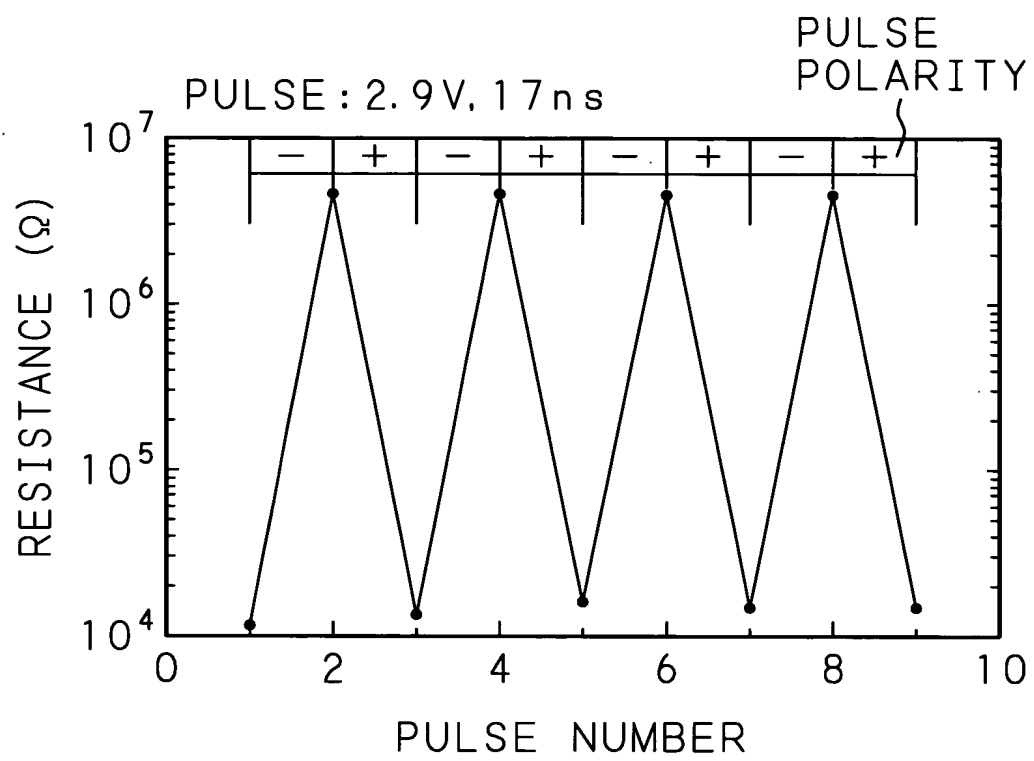


FIG. 9
PRIOR ART

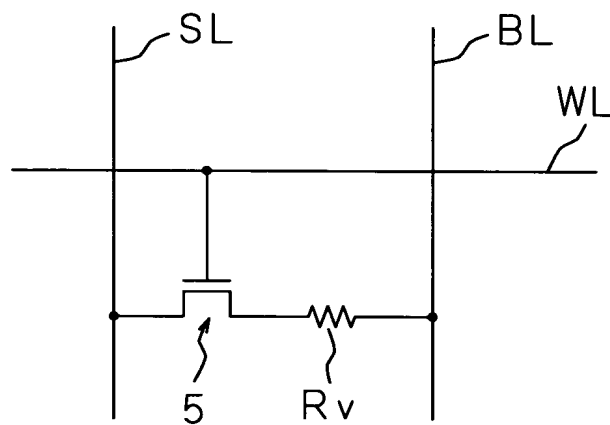
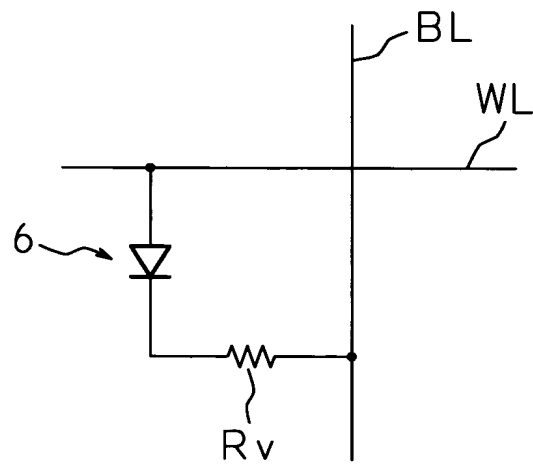


FIG. 10
PRIOR ART



A cross-sectional diagram of a semiconductor device. The top layer is labeled BL. Below it are three stacked rectangular regions labeled 1, 2, and 3, which are grouped by a bracket labeled Rv. To the right of these is a wavy line representing a surface or interface, labeled 5g, WL, and 12. Below the BL layer is a horizontal layer labeled 11. Underneath layer 11 is another horizontal layer labeled SL. At the bottom is a substrate labeled 10. Several vertical structures are shown: a central one labeled 7, and two others labeled 5d and 5s. A bracket labeled 5 spans across the middle section of the device.

FIG. 12
PRIOR ART

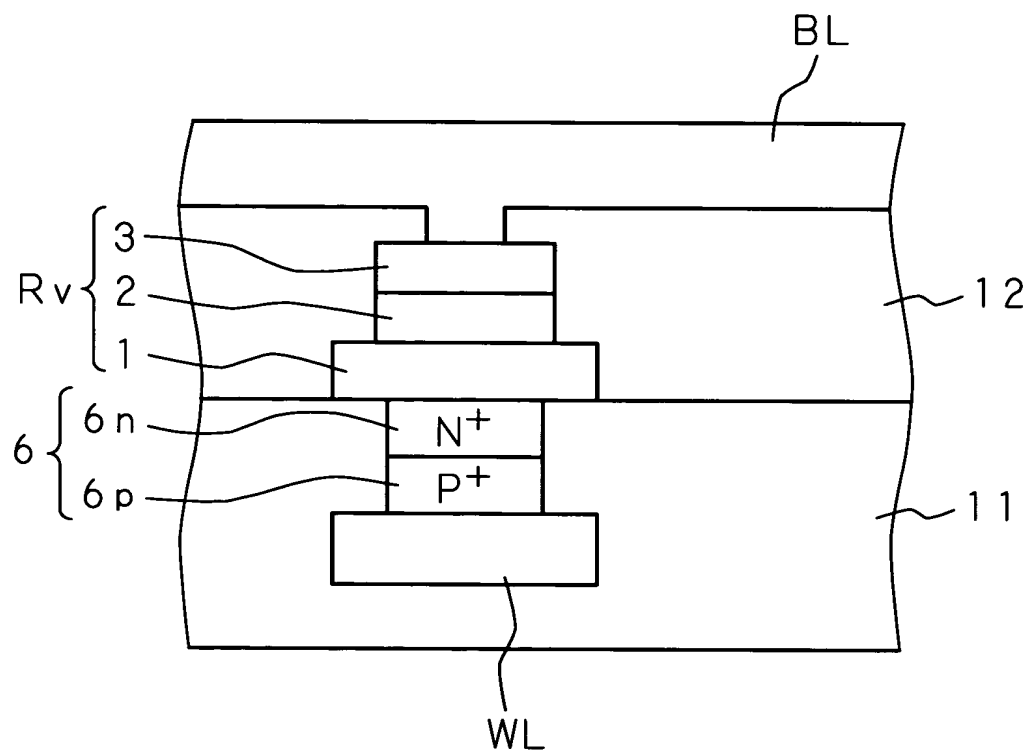


FIG. 13A
PRIOR ART

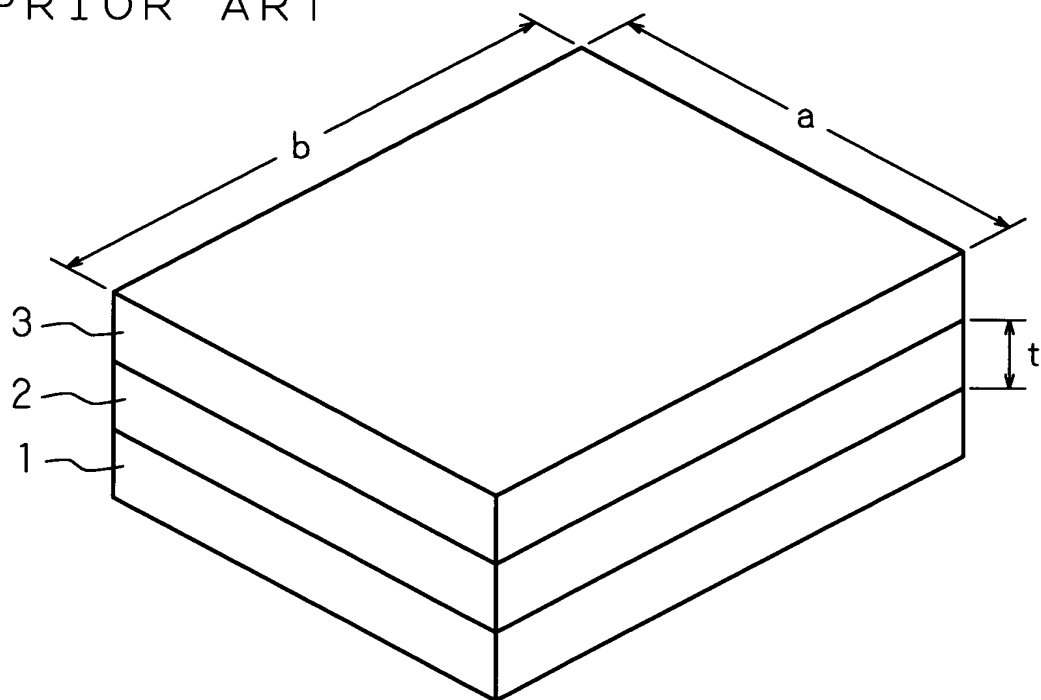


FIG. 13B
PRIOR ART

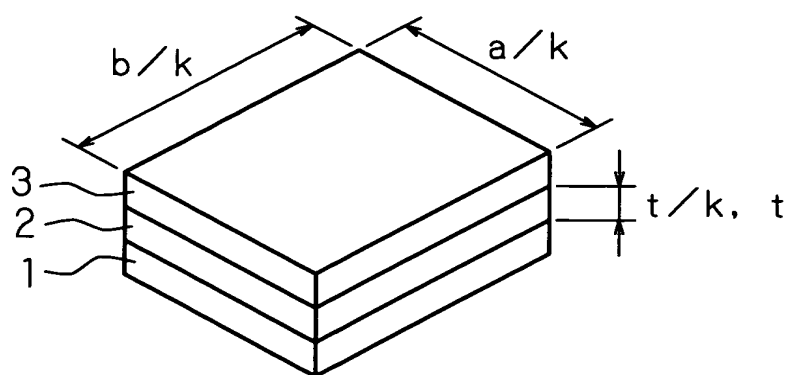


FIG. 14A
PRIOR ART

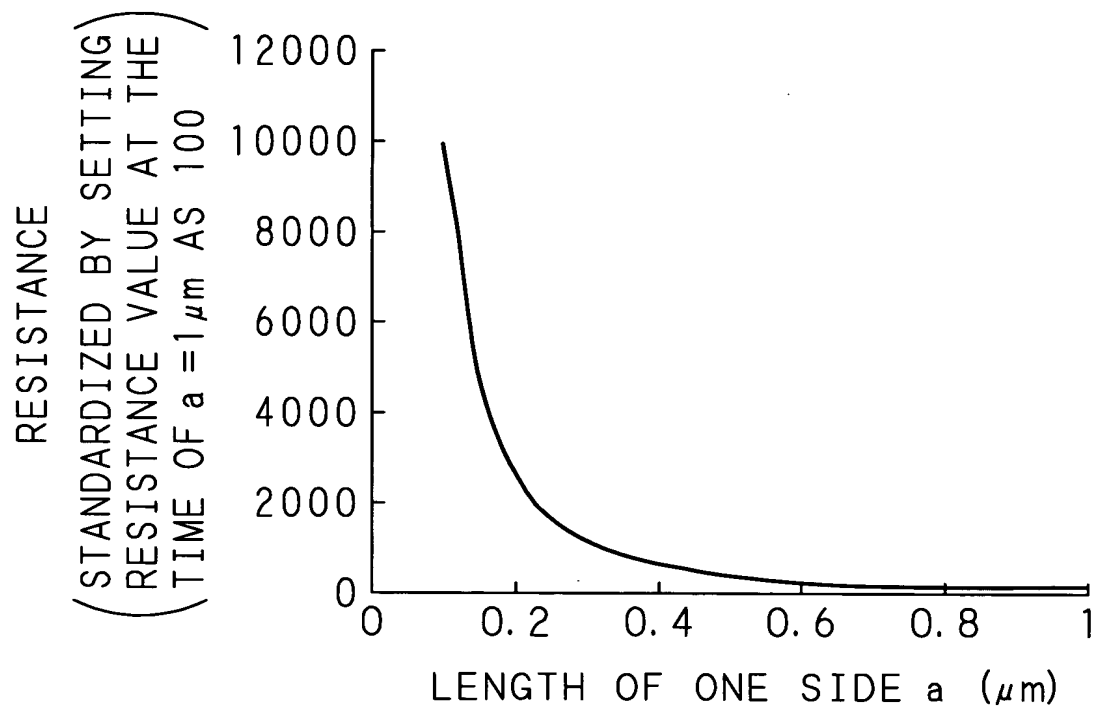


FIG. 14B
PRIOR ART

